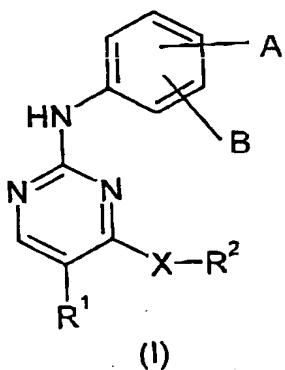


**Claims:**

## 1. Compounds of general formula (I)



5                   in which

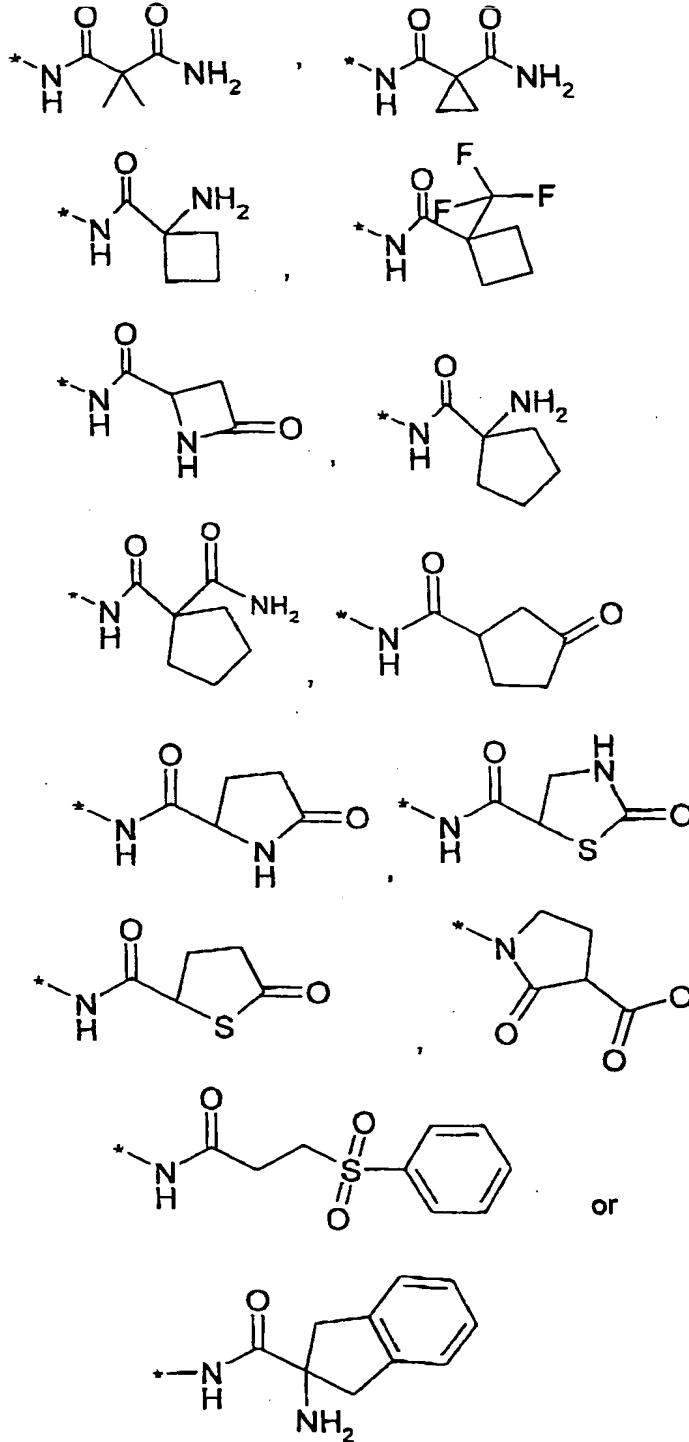
A or B          in each case independently of one another represent cyano,  
halogen, hydrogen, hydroxy, aryl or the group  $-NO_2$ ,  $-NH_2$ ,  $-NR^3R^4$ ,  $-C_{1-6}\text{-alkyl}-NR^3R^4$ ,  $-N(C_{1-6}\text{-hydroxyalkyl})_2$ ,  $-NH-C(NH)-CH_3$ ,  $-NH(CO)-R^5$ ,  $-NHCOOR^6$ ,  $-NR^7-(CO)-NR^8R^9$ ,  $-NR^7-(CS)-NR^8R^9$ ,  $-COOR^5$ ,  $-CO-NR^8R^9$ ,  $-CONH-C_{1-6}\text{-alkyl}-COOH$ ,  $-SO_2-CH_3$ , 4-bromo-1-methyl-1*H*-pyrazolo-3-yl  
or represent  $C_{1-6}\text{-alkyl}$  optionally substituted in one or more places, the same way or differently with halogen, hydroxy, cyano or with the group  $-COOR^5$ ,  $-CONR^8R^9$ ,  $-NH_2$ ,  $-NH-SO_2-CH_3$ ,  $-NR^8R^9$ ,  $-NH-(CO)-R^5$ ,  $-NR^7-(CO)-NR^8R^9$ ,  $-SO_2-NHR^3$ ,  $-O-(CO)-R^5$  or  $-O-(CO)-C_{1-6}\text{-alkyl}-R^5$ ,

X                 represents an oxygen atom or the group  $-NH-$  or  $-NR^3R^4$ ,

R<sup>1</sup>               represents hydrogen, halogen, hydroxymethyl,  $C_{1-6}\text{-alkyl}$ , cyano or the group  $-COOH$ ,  $-COO\text{-iso-propyl}$ ,  $-NO_2$ ,  $-NH-(CO)-(CH_2)_2-COOH$  or  $-NH-(CO)-(CH_2)_2-COO-C_{1-6}\text{-alkyl}$ , whereby the  $C_{1-6}\text{-alkyl}$  can optionally be substituted in one or more places, in the same way or differently with halogen,

R<sup>2</sup>               represents hydrogen or the group  $-NH-(CO)\text{-aryl}$  or  $C_{1-6}\text{-alkyl}$  optionally substituted in one or more places, the same way or differently with cyano, hydroxy, aryl, heteroaryl,  $C_{3-6}$ -heterocycloalkylring, which can optionally be interrupted with one or more nitrogen atoms, or substituted with the group  $-NR^8R^9$ , -

NH-(CO)-NR<sup>8</sup>R<sup>9</sup>, -NH-(CO)-S-C<sub>1-6</sub>-alkyl, -NH-(CS)-NR<sup>8</sup>R<sup>9</sup>, -NH-(CO)O-CH<sub>2</sub>-phenyl, -NH-(CO)H, -NH(CO)-R<sup>5</sup>, -NH(CO)-OR<sup>5</sup>, -(CO)-NH-NH<sub>2</sub>, -(CO)-NH-CH<sub>2</sub>-(CO)-NH<sub>2</sub>, -(CO)-NH-C<sub>1-6</sub>-alkyl, -COOH,



one or more places, the same or differently with halogen, hydroxy, C<sub>1-6</sub>-alkyl, -NH<sub>2</sub>, -NH-(CO)-CH<sub>2</sub>-NH<sub>2</sub>, -NO<sub>2</sub>, -(CO)-C(CH<sub>2</sub>)-C<sub>2</sub>H<sub>5</sub>, -COOR<sup>6</sup>, -COOC(CH<sub>3</sub>)<sub>3</sub>, or represents C<sub>3</sub>-alkinyl,

5 R<sup>3</sup> or R<sup>4</sup> in each case independently of one another represent hydrogen or C<sub>1-6</sub>-alkyl optionally substituted in one or more places, the same way or differently with hydroxy, phenyl or hydroxyphenyl, or

10 R<sup>3</sup> and R<sup>4</sup> together form a C<sub>3-6</sub>-heterocycloalkyrling containing at least one nitrogen atom and optionally can be interrupted by one or more oxygen and/or sulfur atoms and/or can be interrupted by one or more -(CO)- groups in the ring and/or optionally can contain one or more possible double bonds in the ring, whereby the C<sub>3-6</sub>-heterocycloalkyrling can optionally be substituted with C<sub>1-6</sub>-alkyl, C<sub>1-6</sub>-alkyl-COOH or C<sub>1-6</sub>-alkyl-NH<sub>2</sub>,

15 R<sup>5</sup> represents hydrogen, C<sub>1-6</sub>-alkyl, C<sub>1-6</sub>-alkoxy, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-cycloalkyrling, aryl, heteroaryl, the group -(CO)-NH<sub>2</sub> or C<sub>3-6</sub>-heterocycloalkyrling that can optionally be interrupted with one or more nitrogen and/or oxygen and/or sulfur atoms and/or can be interrupted by one or more -(CO)- groups in the ring and/or optionally can contain one or more possible double bonds in the ring

20 and C<sub>1-6</sub>-alkyl, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-cycloalkyrling, C<sub>3-6</sub>-heterocycloalkyrling defined above, aryl or heteroaryl can optionally be substituted in one or more places, the same way or differently with halogen, hydroxy, C<sub>1-6</sub>-alkyl, C<sub>1-6</sub>-alkoxy, C<sub>3-6</sub>-cycloalkyl, C<sub>3-6</sub>-heterocycloalkyrling defined above, aryl, heteroaryl or with the group -NR<sup>8</sup>R<sup>9</sup>, -NO<sub>2</sub>, -NR<sup>7</sup>-(CO)-R<sup>5</sup>, -NH(CO)-C<sub>1-6</sub>-alkyl-NH-(CO)-C<sub>1-6</sub>-alkyl, -NR<sup>7</sup>-(CO)-NR<sup>8</sup>R<sup>9</sup>, -CO-CH<sub>3</sub>, -COOH, -CO-NR<sup>8</sup>R<sup>9</sup>, -SO<sub>2</sub>-aryl, -SH, -S-C<sub>1-6</sub>-alkyl, -SO<sub>2</sub>-NR<sup>8</sup>R<sup>9</sup>, whereby aryl itself can optionally be substituted in one or more places, the same way or differently with halogen, hydroxy, C<sub>1-6</sub>-alkyl or C<sub>1-6</sub>-alkoxy,

5           R<sup>6</sup>     represents C<sub>1-6</sub>-alkyl, C<sub>2-6</sub>-alkenyl or phenyl,  
              whereby C<sub>1-6</sub>-alkyl may optionally be substituted with C<sub>3-6</sub>-  
              heterocycloalkyrling that can optionally be interrupted with one or  
              more nitrogen and/or oxygen and/or sulfur atoms and/or can be  
              interrupted by one or more -(CO)- groups in the ring and/or  
              optionally can contain one or more possible double bonds in the  
              ring.

10           R<sup>7</sup>     represents hydrogen or C<sub>1-6</sub>-alkyl,

10           R<sup>8</sup> or R<sup>9</sup>     in each case independently of one another represent hydrogen,  
              C<sub>1-6</sub>-alkyl, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-cycloalkyl, aryl or heteroaryl or the  
              group R<sup>10</sup>,

15           whereby C<sub>1-6</sub>-alkyl, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-cycloalkyl, aryl or heteroaryl  
              can optionally be substituted in one or more places, the same way  
              or differently with halogen, heteroaryl, hydroxy, C<sub>1-6</sub>-alkoxy,  
              hydroxy-C<sub>1-6</sub>-alkoxy or the group -COOH, -NO<sub>2</sub>, -NR<sup>8</sup>R<sup>9</sup>, -N(C<sub>1-6</sub>-  
              alkyl)<sub>2</sub> or with a C<sub>3-6</sub>-heterocycloalkyrling can optionally be  
              interrupted with one or more nitrogen and/or oxygen and/or sulfur  
              atoms and/or can be interrupted by one or more -(CO)- groups in  
              the ring and/or optionally can contain one or more possible double  
              bonds in the ring.

20           or

25           R<sup>8</sup> and R<sup>9</sup> together form a C<sub>3-6</sub>-heterocycloalkyrling containing at least one  
              nitrogen atom and optionally can be interrupted by one or more  
              oxygen and/or sulfur atoms and/or can be interrupted by one or  
              more -(CO)- groups in the ring and/or optionally can contain one  
              or more possible double bonds in the ring, whereby the C<sub>3-6</sub>-  
              heterocycloalkyrling can optionally be substituted in one or more  
              places, the same way or differently with hydroxy or the group -  
              NR<sup>8</sup>R<sup>9</sup>, -NH(CO)-R<sup>5</sup>, hydroxy-C<sub>1-6</sub>-alkyl or -COOH and

30           R<sup>10</sup>     represents -SO<sub>2</sub>-aryl, -SO<sub>2</sub>-heteroaryl or -SO<sub>2</sub>-NH<sub>2</sub> or -SO<sub>2</sub>-C<sub>1-6</sub>-  
              alkyl,  
              whereby the aryl can be substituted with -C<sub>1-6</sub>-alkyl,  
              with the following provisos:

whereby when X represents  $-NR^3R^4$  then  $R^2$  does not represent a substituent,

whereby when A and B represent hydrogen, X represents  $-NH-$  and  $R^2$  represents  $C_{1-6}$ -alkyl,

5

then  $R^1$  represents  $-NH-(CO)-CH(NH_2)-(CH_2)_2-COOH$  or  $-NH-(CO)-CH(NH_2)-(CH_2)_2-COOC_2H_5$ ,

whereby when A represents  $-(CO)-OC_2H_5$  or hydroxy, B represents hydrogen, X represents oxygen,  $R^1$  represents halogen, then  $R^2$  represents  $C_3$ -alkinyl,

10

whereby when A represents  $-(CO)-OC_2H_5$  or hydroxy, B represents hydrogen, X represents  $-NH-$ ,  $R^1$  represents  $-NO_2$ , then  $R^2$  represents  $C_3$ -alkinyl,

15

whereby when A represents  $-(CO)-OCH_3$ , then X represents oxygen,  $R^1$  represents halogen,  $R^2$  represents  $C_3$ -alkinyl and B represents  $-NH_2$ ,  $-NHC_2H_4OH$ ,  $-N(C_2H_4OH)_2$ ,  $-NH-(CO)-CH_2-O(CO)CH_3$ ,

20

whereby when A represents  $-(CO)-OCH_3$ , then X represents  $-NH-$ ,  $R^1$  represents halogen,  $R^2$  represents  $-C_2H_4$ -imidazolyl and B represents hydrogen  $-NH_2$ ,

25

whereby when A represents  $-NHSO_2-CH_3$ ,

then B represents hydrogen, X represents  $-NH-$ ,  $R^1$  represents halogen and  $R^2$  represents  $-C_2H_4$ -imidazolyl,

25

whereby when  $R^1$  represents  $-COO$ -iso-propyl,

then X represents  $-NH-$  and  $R^2$  represents  $C_3$ -alkinyl and A or B independently of one another represent the group  $-NO_2$  or  $-NH-(CO)-CF_3$ ,

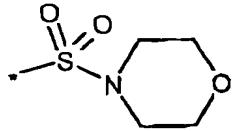
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whereby when  $R^1$  represents halogen, X represents  $-NH-$ , B represents hydrogen and  $R^2$  represents  $C_{1-6}$ -alkyl substituted with  $-NH_2$ , then A represents  $-NH-(CO)-C_6$ -cycloalkyl-NH<sub>2</sub>,

35

whereby when  $R^1$  represents halogen, X represents  $-NH-$ , B represents  $-S-CH_3$  and  $R^2$  represents imidazolyl,

then A represents the group



as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

5

2. Compounds of general formula (I), according to claim 1

in which

A or B in each case independently of one another represent cyano, halogen, hydrogen, hydroxy, tetrazolyl or the group -NH<sub>2</sub>, -NR<sup>3</sup>R<sup>4</sup>,

10

-C<sub>1-6</sub>-alkyl-NR<sup>3</sup>R<sup>4</sup>, -NH-C(NH)-CH<sub>3</sub>, -NH(CO)-R<sup>5</sup>, -NHCOOR<sup>6</sup>, -NR<sup>7</sup>-(CO)-NR<sup>8</sup>R<sup>9</sup>, -C<sub>1-6</sub>-alkyl-COOH, -COOH, -CONH<sub>2</sub>, -CONH-C<sub>1-6</sub>-alkyl-COOH,

15

or represent C<sub>1-6</sub>-alkyl optionally substituted in one or more places, the same way or differently with halogen, hydroxy or with the group -COOH, -CONR<sup>8</sup>R<sup>9</sup>, -NH-SO<sub>2</sub>-CH<sub>3</sub> or -NR<sup>8</sup>R<sup>9</sup>,

X represents the group -NH- or -NR<sup>3</sup>R<sup>4</sup>,

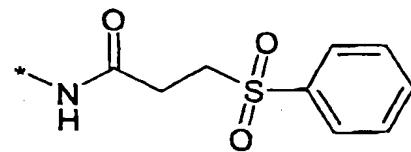
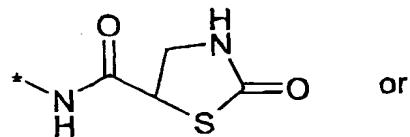
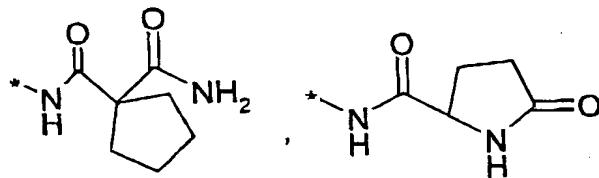
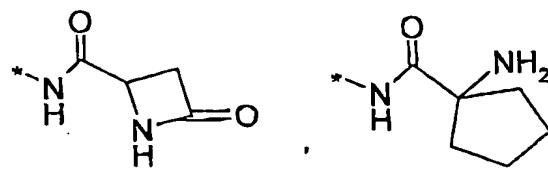
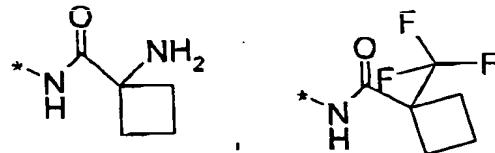
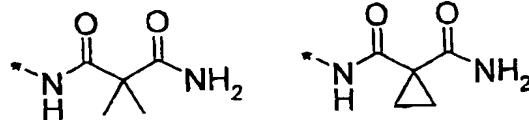
R<sup>1</sup> represents cyano, hydrogen, halogen or C<sub>1-6</sub>-alkyl, whereby the C<sub>1-6</sub>-alkyl can optionally be substituted in one or more places, in the same way or differently with halogen,

20

R<sup>2</sup> represents hydrogen or the group -NH-(CO)-aryl or -C<sub>1-6</sub>-alkyl optionally substituted in one or more places, the same way or differently with cyano, hydroxy, aryl, heteroaryl, C<sub>3-6</sub>-heterocycloalkylring which can be optionally be interrupted in one or more places with one or more nitrogen atoms, or substituted with the group -NR<sup>8</sup>R<sup>9</sup>, -NH-(CO)-NR<sup>8</sup>R<sup>9</sup>, -NH-(CO)-S-C<sub>1-6</sub>-alkyl, -NH-(CS)-NR<sup>8</sup>R<sup>9</sup>, -NH(CO)-R<sup>5</sup>, -NH(CO)-OR<sup>5</sup>, -(CO)-NH-NH<sub>2</sub>, -(CO)-NH-CH<sub>2</sub>-(CO)-NH<sub>2</sub>, -(CO)-NH-C<sub>1-6</sub>-alkyl, -COOH whereby the aryl or the heteroaryl can optionally be substituted in one or more places, the same way or differently with hydroxy, C<sub>1-6</sub>-alkyl, -NH<sub>2</sub>, -

25

NH-(CO)-CH<sub>2</sub>-NH<sub>2</sub>, -NO<sub>2</sub>, -COOR<sup>6</sup>,



R<sup>3</sup> or R<sup>4</sup> in each case independently of one another represent hydrogen,  
C<sub>1-6</sub>-alkyl optionally substituted in one or more places, the same  
way or differently with hydroxy, phenyl or hydroxyphenyl,  
or

R<sup>3</sup> and R<sup>4</sup> together form a C<sub>3-6</sub>-heterocycloalkyrling containing at least one  
nitrogen atom and optionally can be interrupted by one or more  
oxygen and/or sulfur atoms and/or can be interrupted by one or  
more -(CO)- groups in the ring and/or optionally can contain one  
or more possible double bonds in the ring, whereby the C<sub>3-6</sub>-

heterocycloalkyrling can optionally be substituted with C<sub>1-6</sub>-alkyl, C<sub>1-6</sub>-alkyl-COOH or C<sub>1-6</sub>-alkyl-NH<sub>2</sub>,

10 R<sup>5</sup> represents hydrogen, C<sub>1-6</sub>-alkyl, C<sub>1-6</sub>-alkoxy, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-cycloalkyrling, heteroaryl, the group -(CO)-NH<sub>2</sub> or C<sub>3-6</sub>-heterocycloalkyrling that can optionally be interrupted with one or more nitrogen and/or oxygen and/or sulfur atoms and/or can be interrupted by one or more -(CO)- groups in the ring and/or optionally can contain one or more possible double bonds in the ring

15 and C<sub>1-6</sub>-alkyl, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-heterocycloalkyrling define above, aryl or heteroaryl can optionally be substituted in one or more places, the same way or differently with halogen, hydroxy, C<sub>1-6</sub>-alkyl, C<sub>1-6</sub>-alkoxy, C<sub>3-6</sub>-cycloalkyl, C<sub>3-6</sub>-heterocycloalkyrling define above, aryl, heteroaryl or with the -NR<sup>8</sup>R<sup>9</sup>, -NO<sub>2</sub>, -NR<sup>7</sup>-(CO)-R<sup>5</sup>, -NH(CO)-C<sub>1-6</sub>-alkyl-NH-(CO)-C<sub>1-6</sub>-alkyl, -NR<sup>7</sup>-(CO)-NR<sup>8</sup>R<sup>9</sup>, -CO-CH<sub>3</sub>, -COOH, -CO-NR<sup>8</sup>R<sup>9</sup>, -SO<sub>2</sub>-aryl, -SH, -S-C<sub>1-6</sub>-alkyl, -SO<sub>2</sub>-NR<sup>8</sup>R<sup>9</sup>, whereby aryl itself can optionally be substituted in one or more places, the same way or differently with halogen or hydroxy, C<sub>1-6</sub>-alkyl or C<sub>1-6</sub>-alkoxy,

20 R<sup>7</sup> represents hydrogen or C<sub>1-6</sub>-alkyl,

25 R<sup>8</sup> or R<sup>9</sup> in each case independently of one another represent hydrogen, C<sub>1-6</sub>-alkyl, aryl or heteroaryl or the group R<sup>10</sup>, whereby C<sub>1-6</sub>-alkyl, aryl or heteroaryl can optionally be substituted in one or more places, the same way or differently with halogen, heteroaryl, hydroxy, C<sub>1-6</sub>-alkoxy, hydroxy-C<sub>1-6</sub>-alkoxy or with the group -COOH, -NO<sub>2</sub>, or a C<sub>3-6</sub>-heterocycloalkyrling can optionally be interrupted with one or more nitrogen and/or oxygen and/or sulfur atoms and/or can be interrupted by one or more -(CO)- groups in the ring and/or optionally can contain one or more possible double bonds in the ring

30 or

R<sup>8</sup> and R<sup>9</sup> together form a C<sub>3-6</sub>-heterocycloalkyrling containing at least one nitrogen atom and optionally can be interrupted by one or more

oxygen and/or sulfur atoms and/or can be interrupted by one or more -(CO)- groups in the ring and/or optionally can contain one or more possible double bonds in the ring, whereby the C<sub>3-6</sub>-heterocycloalkyrling can optionally be substituted in one or more places, the same way or differently with hydroxy, hydroxy-C<sub>1-6</sub>-alkyl or the group -NR<sup>8</sup>R<sup>9</sup>, -NH(CO)-R<sup>5</sup> or -COOH and

5 R<sup>10</sup> represents -SO<sub>2</sub>-NH<sub>2</sub>, -SO<sub>2</sub>-C<sub>1-6</sub>-alkyl, -SO<sub>2</sub>-aryl, or -SO<sub>2</sub>-heteroaryl,

whereby the aryl can be substituted with -C<sub>1-6</sub>-alkyl,  
10 as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

### 3. Compounds of general formula (I) according to claim 1 or 2

in which

15 A or B in each case independently of one another represent hydrogen, tetrazolyl or the group -N(CH<sub>3</sub>)<sub>2</sub>, -NH-(CO)-pyrrolidinyl, -NH-(CO)-pentyl, -NH-(CO)-hexyl, -NH-(CO)-hexyl-NH<sub>2</sub>, -NH-(CO)-C<sub>3</sub>H<sub>7</sub>, -NH-(CO)-CH<sub>2</sub>-phenyl, -NH-(CO)-CH<sub>2</sub>-NH<sub>2</sub>, -NH-(CO)-C<sub>2</sub>H<sub>4</sub>-NH<sub>2</sub>, -NH-(CO)-CH(NH<sub>2</sub>)-CH<sub>3</sub>, -NH-(CO)-CH(NH<sub>2</sub>)-hydroxyphenyl, -NH-(CO)-CH(NH<sub>2</sub>)-CH<sub>2</sub>-phenyl, -NH-(CO)-CH(NH<sub>2</sub>)-CH<sub>2</sub>-hydroxyphenyl, -NH-(CO)-CH(NH-(CO)-CH<sub>3</sub>)-CH<sub>2</sub>-phenyl, -NH-(CO)-CH<sub>2</sub>-NH-(CO)-CH<sub>3</sub>, -NH-(CO)-N(C<sub>2</sub>H<sub>5</sub>)(C<sub>2</sub>H<sub>4</sub>-piperidinyl), -NH-(CO)-N(CH<sub>3</sub>)(C<sub>2</sub>H<sub>4</sub>-piperidinyl), -NH-(CO)-CH<sub>2</sub>-NH(CH<sub>3</sub>), -CH<sub>2</sub>-N(CH<sub>3</sub>)<sub>2</sub>, -NH-(CO)NH-CH<sub>2</sub>-COOH, hydantoinyl, -CH<sub>2</sub>-COOH  
20 whereby the pyrrolidinyl can optionally be substituted with hydroxy or the group -NH<sub>2</sub>, -N(CH<sub>3</sub>)<sub>2</sub> or -NH-(CO)-CH<sub>3</sub>, and whereby hydantoinyl can be substituted with -CH<sub>3</sub>, -CH<sub>2</sub>-COOH, or -(CO)-thiazolidinonyl,

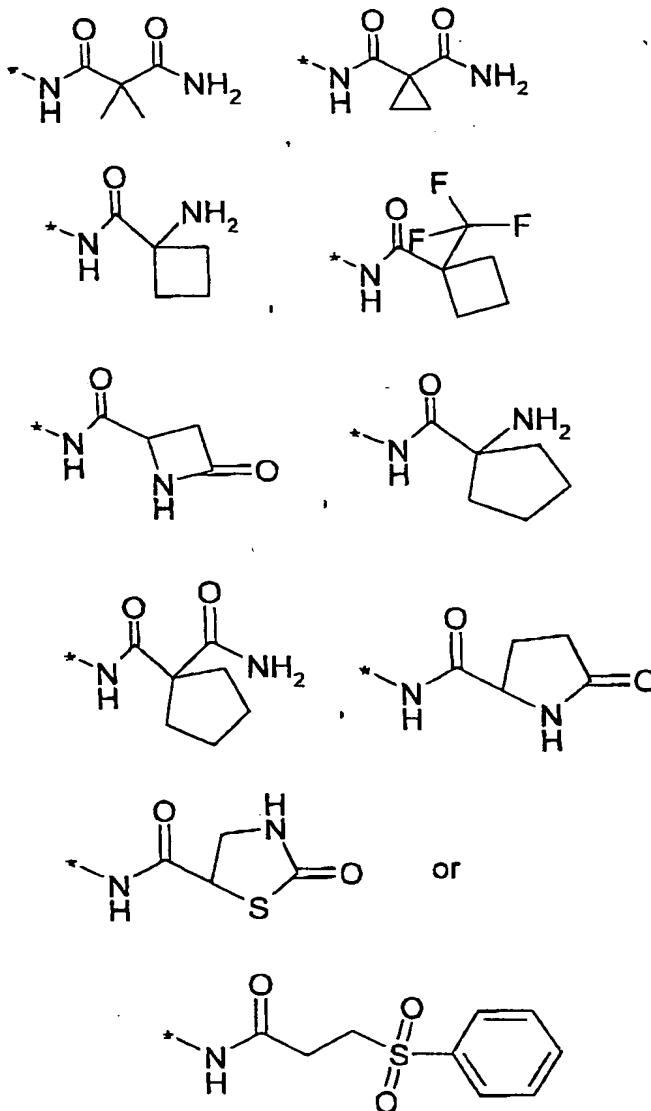
25 X represents or the group -NH-.

30 R<sup>1</sup> represents halogen and  
R<sup>2</sup> represents hydrogen or the group -NH-(CO)-phenyl or -C<sub>2</sub>H<sub>4</sub>-, -C<sub>3</sub>H<sub>6</sub>- both can optionally be substituted in one or more places, the same way or differently with cyano, hydroxy, phenyl,

naphthyl, imidazolyl, thiazolyl, pyridyl, 2-oxazolinyl, piperidinyl, -NH<sub>2</sub>, -NH-CH<sub>2</sub>-thienyl, -NH-pyridinyl-NO<sub>2</sub>, -NH-thiazolyl, -SO<sub>2</sub>-thienyl, -SO<sub>2</sub>-NH<sub>2</sub>, -SO<sub>2</sub>-CH<sub>3</sub>, -SO<sub>2</sub>-C<sub>3</sub>H<sub>7</sub>, pyrrolidinonyl substituted with -COOH, -NH-(CO)-NH-thienyl, -NH-(CO)-NH-phenyl, -NH-(CO)-NH-C<sub>2</sub>H<sub>5</sub>, -NH-(CO)-C(CH<sub>3</sub>)<sub>3</sub>, -NH-(CO)-S-C<sub>2</sub>H<sub>5</sub>, -NH-(CS)-NH-C<sub>2</sub>H<sub>5</sub>, -NH-(CO)-C<sub>2</sub>H<sub>5</sub>, -NH-(CO)-thienyl, -(CO)-NH-NH<sub>2</sub>, -(CO)-NH-CH<sub>2</sub>-(CO)-NH<sub>2</sub>, -(CO)-NH-C<sub>2</sub>H<sub>5</sub>, -COOH whereby the phenyl or the imidazolyl, thiazolyl can optionally be substituted in one or more places, the same way or differently with hydroxy, -CH<sub>3</sub>, -NH-(CO)-CH<sub>2</sub>-NH<sub>2</sub>, -COOC<sub>2</sub>H<sub>5</sub>, -COOC(CH<sub>3</sub>)<sub>3</sub>,

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-251-

as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

4. Compounds of general formula (I) according to any one of claims 1 to 3

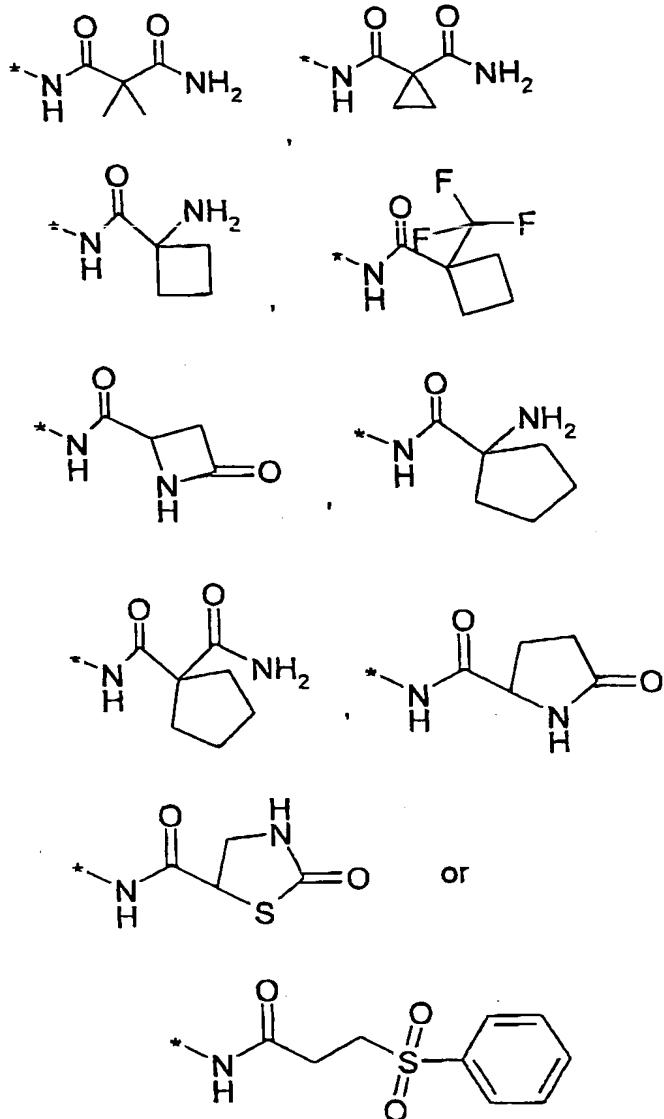
5 in which

A or B in each case independently of one another represent hydrogen or the group -NH-(CO)-pyrrolidinyl, -NH-(CO)-piperidinyl, -NH-(CO)-morpholinyl, -NH-(CO)-hexyl-NH<sub>2</sub>, -NH-(CO)-CH(NH<sub>2</sub>)-hydroxyphenyl, -NH-(CO)-CH(NH<sub>2</sub>)-CH<sub>2</sub>-hydroxyphenyl, hydantoin optionally substituted with -CH<sub>3</sub>,

10 X represents or the group -NH-,

R<sup>1</sup> represents halogen and

15 R<sup>2</sup> represents hydrogen, -C<sub>2</sub>H<sub>4</sub>-imidazolyl or -C<sub>3</sub>H<sub>7</sub> which can optionally be substituted in one or more places, the same way or differently with the group -NH-CH<sub>2</sub>-thienyl, -NH-(CO)-C<sub>2</sub>H<sub>5</sub>, -NH-(CO)-C(CH<sub>3</sub>)<sub>3</sub>,



as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

5

5. Compounds of general formula (I) according to claim 4,

- N-[3-[[5-bromo-4-[[3-[[1-(trifluoromethyl)cyclobutyl]carbonyl]amino]propyl]amino]-2-pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
 10 N-[3-[[5-bromo-4-[[3-[[1-oxo-3-(phenylsulfonyl)propyl]amino]propyl]amino]-2-pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
 N-[3-[[5-bromo-2-[[3-[(1-pyrrolidinyl)carbonyl]amino]phenyl]amino]-4-

pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
N-[3-[[4-[[3-[(1-aminocyclopentyl)carbonyl]amino]propyl]amino]-5-bromo-2-  
pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
N-[3-[[4-[[3-[(1-aminocyclobutyl)carbonyl]amino]propyl]amino]-5-iodo-2-  
pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
5 N<sup>1</sup>-[3-[[5-bromo-2-[[3-[(1-pyrrolidinyl)carbonyl]amino]phenyl]amino]-4-  
pyrimidinyl]amino]propyl]-1,1-cyclopentanedicarboxamide,  
(4R)-N-[3-[[5-bromo-2-[[3-(2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-  
pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide,  
10 (4R)-N-[3-[[5-bromo-2-[[3-(3-methyl-2,5-dioxo-1-  
imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-2-oxo-4-  
thiazolidinecarboxamide,  
3-[3-[[5-bromo-4-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-  
pyrimidinyl]amino]phenyl]-2,4-imidazolidinedione,  
15 3-[3-[[5-bromo-4-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-  
pyrimidinyl]amino]phenyl]-1-methyl-2,4-imidazolidinedione,  
N'-[3-[[5-bromo-4-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-  
pyrimidinyl]amino]phenyl]-N-ethyl-N-[2-(1-piperidinyl)ethyl]-urea,  
N-[3-[[5-bromo-4-[[3-[(2,2-dimethyl-1-oxopropyl)amino]propyl]amino]-2-  
20 pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
N-[3-[[2-[[3-[(2S)-2-amino-3-(4-hydroxyphenyl)-1-  
oxopropyl]amino]phenyl]amino]-5-bromo-4-pyrimidinyl]amino]propyl]-2,2-  
dimethyl-propanediamide,  
N-[3-[[2-[[3-[(1-aminocyclohexyl)carbonyl]amino]phenyl]amino]-5-bromo-4-  
25 pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
N-[3-[[2-[[3-[(2S)-2-amino-2-phenylacetyl]amino]phenyl]amino]-5-bromo-4-  
pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
N-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-  
bromo-4-pyrimidinyl]amino]propyl]-5-oxo-2-pyrrolidinecarboxamide,  
30 N-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-  
bromo-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
N<sup>1</sup>-[3-[[5-bromo-2-[[3-[(2S)-2-pyrrolidinylcarbonyl]amino]phenyl]amino]-4-  
pyrimidinyl]amino]propyl]-1,1-cyclopropanedicarboxamide,

N-[3-[[5-bromo-2-[[3-(2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-4-morpholinecarboxamide,  
5 N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-1-pyrrolidinecarboxamide,  
N-(3-((5-bromo-4-((3-((2-thienylcarbonyl)amino)propyl)amino)-2-pyrimidinyl)amino)phenyl)-1-pyrrolidinecarboxamide,  
10 N1-(3-((5-bromo-2-((3-((1-pyrrolidinylcarbonyl)amino)phenyl)amino)-4-pyrimidinyl)amino)propyl)-1,1-cyclopropaneddicarboxamide,  
N-(3-((5-bromo-4-((3-((1-oxopropyl)amino)propyl)amino)-2-pyrimidinyl)amino)phenyl)-1-pyrrolidinecarboxamide,  
N-(3-((5-iodo-4-((3-((2-thienylcarbonyl)amino)propyl)amino)-2-pyrimidinyl)amino)phenyl)-1-pyrrolidinecarboxamide,  
15 N-[3-[[5-bromo-4-[[3-[[[(2S)-5-oxo-2-pyrrolidinyl]carbonyl]amino]propyl]amino]-2-pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
N-[3-[[5-bromo-4-[[3-[[[(2S)-4-oxo-2-azetidinyl]carbonyl]amino]propyl]amino]-2-pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
20 (4R)-N-[3-[[5-bromo-2-[[3-[(1-pyrrolidinylcarbonyl)amino]phenyl]amino]-4-pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide or  
N-[3-[[4-[[3-[(1-aminocyclobutyl)carbonyl]amino]propyl]amino]-5-bromo-2-pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide.

- 25 6. Compounds of general formula (I) according to claim 1,  
in which  
A or B in each case independently of one another represent hydrogen or  
the group -NO<sub>2</sub>, -NH<sub>2</sub>, -NR<sup>3</sup>R<sup>4</sup>, -N(C<sub>1-6</sub>-hydroxyalkyl)<sub>2</sub>, -NH(CO)-  
R<sup>5</sup>, -NHCOOR<sup>6</sup>, -NR<sup>7</sup>-(CO)-NR<sup>8</sup>R<sup>9</sup>, -NR<sup>7</sup>-(CS)-NR<sup>8</sup>R<sup>9</sup>, -COOR<sup>5</sup>, -  
30 CO-NR<sup>8</sup>R<sup>9</sup>, -SO<sub>2</sub>-CH<sub>3</sub>, 4-bromo-1-methyl-1H-pyrazolo-3yl  
or C<sub>1-6</sub>-alkyl optionally substituted in one or more places, the same  
way or differently with cyano, halogen, hydroxy or the group -NH<sub>2</sub>,

$-NH-(CO)-R^5$ ,  $-SO_2-NHR^3$ ,  $-COOR^5$ ,  $-CONR^8R^9$ ,  $-O-(CO)-R^5$ ,  $-O-(CO)-C_{1-6}\text{-alkyl}-R^5$ ,

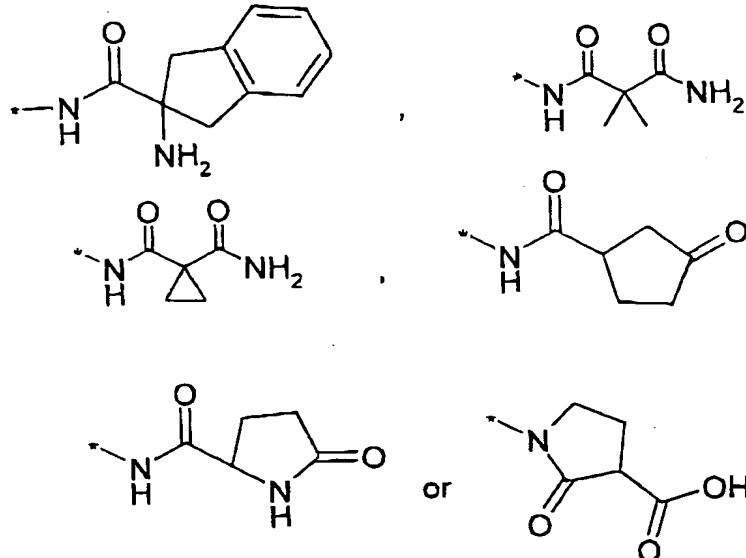
X represents an oxygen atom or the group  $-NH-$ .

R<sup>1</sup> represents hydrogen, halogen, hydroxymethyl or the group  $-COOH$ ,  $-COO\text{-iso-propyl}$ ,  $-NO_2$ ,  $-NH-(CO)-(CH_2)_2-COOH$  or  $-NH-(CO)-(CH_2)_2-COO-C_{1-6}\text{-alkyl}$ ,

5

R<sup>2</sup> represents C<sub>1-6</sub>-alkyl optionally substituted in one or more places, the same way or differently with hydroxy, imidazolyl or the group  $-NH_2$ ,  $-NH-(CO)O-CH_2\text{-phenyl}$ ,  $-NH-(CO)H$ ,  $-NH-(CO)\text{-phenyl}$ ,  $-NH-(CO)-CH_2-O\text{-phenyl}$ ,  $-NH-(CO)-CH_2\text{-phenyl}$ ,  $-NH-(CO)-CH(NH_2)CH_2\text{-phenyl}$ ,  $-NH-(CO)-CH_2-CH(CH_3)\text{-phenyl}$ ,  $-NH-(CO)-CH(NH_2)-(CH_2)_2-COOH$ ,

10



15

, whereby the phenyl can optionally be substituted in one or more places, the same or differently with halogen, C<sub>1-6</sub>-alkyl or  $-(CO)-C(CH_2)-C_2H_5$ , or represents C<sub>3</sub>-alkinyl.

20

R<sup>3</sup> or R<sup>4</sup> in each case independently of one another represent hydrogen or C<sub>1-6</sub>-alkyl optionally substituted in one or more places, the same way or differently with hydroxy, phenyl or hydroxyphenyl, or

R<sup>3</sup> and R<sup>4</sup> together form a C<sub>3-6</sub>-heterocycloalkyrling containing at least one nitrogen atom and optionally can be interrupted by one or more

oxygen and/or sulfur atoms and/or can be interrupted by one or more -(CO)- groups in the ring and/or optionally can contain one or more possible double bonds in the ring, whereby the C<sub>3-6</sub>-heterocycloalkyrling can optionally be substituted with C<sub>1-6</sub>-alkyl, C<sub>1-6</sub>-alkyl-COOH or C<sub>1-6</sub>-alkyl-NH<sub>2</sub>,

5 R<sup>5</sup> represents C<sub>1-6</sub>-alkyl, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-cycloalkyl or phenyl each can optionally be substituted in one or more places, the same way or differently with halogen, hydroxy, phenyl or with the group -NH<sub>2</sub>, -NH(CO)-O-C<sub>1-6</sub>-alkyl, whereby phenyl itself can optionally be substituted in one or more places, the same way or differently with 10 halogen, hydroxy or C<sub>1-6</sub>-alkyl,

R<sup>6</sup> represents C<sub>1-6</sub>-alkyl, C<sub>2-6</sub>-alkenyl or phenyl,

R<sup>7</sup> represents hydrogen or C<sub>1-6</sub>-alkyl and

15 R<sup>8</sup> or R<sup>9</sup> in each case independently of one another represent hydrogen, C<sub>1-6</sub>-alkyl, C<sub>2-6</sub>-alkenyl, C<sub>3-6</sub>-cycloalkyl, aryl or phenyl, whereby aryl or phenyl can optionally be substituted in one or more places, the same way or differently with hydroxy or the group -NO<sub>2</sub> or -N(C<sub>1-6</sub>-alkyl)<sub>2</sub>

or

20 R<sup>8</sup> and R<sup>9</sup> together form a C<sub>3-6</sub>-heterocycloalkyrling containing at least one nitrogen atom and optionally can be interrupted by one or more oxygen and/or sulfur atoms and/or can be interrupted by one or more -(CO)- groups in the ring and/or optionally can contain one or more possible double bonds in the ring, whereby the C<sub>3-6</sub>-heterocycloalkyrling can optionally be substituted with the group -NH<sub>2</sub>,

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as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

30 7. Compounds of general formula (I) according to claim 1 or 6

in which

A or B in each case independently of one another represent hydrogen or the group -NH-C<sub>2</sub>H<sub>4</sub>-OH, -NH-CH<sub>2</sub>-hydroxyphenyl, -NH-(CO)-

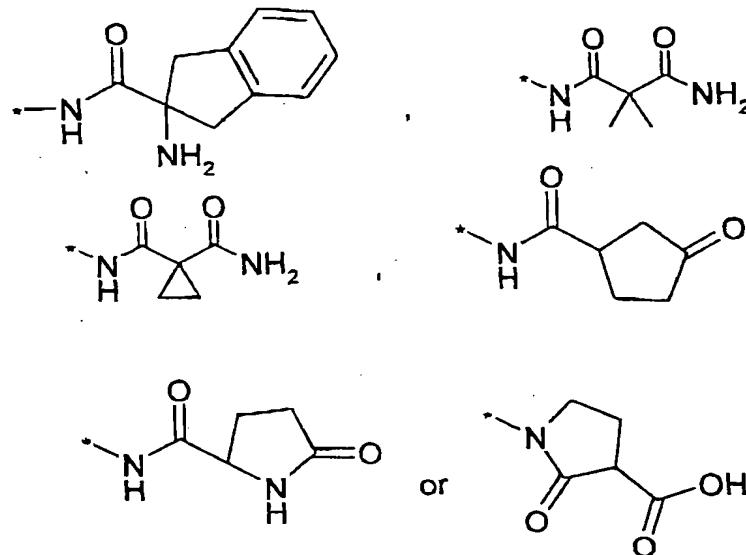
pyrrolidinyl, -NH-(CO)-CH(NH<sub>2</sub>)-CH<sub>2</sub>-phenyl, -NH-(CO)-pentyl-NH<sub>2</sub>,  
 -NH-(CO)-hexyl-NH<sub>2</sub>, -NH-(CO)-CH<sub>2</sub>-NH<sub>2</sub>, -NH-(CO)-CH(NH<sub>2</sub>)-  
 hydroxyphenyl, -NH-(CO)-CH<sub>2</sub>-hydroxyphenyl, -NH-(CO)-CH<sub>2</sub>-  
 methylphenyl, -NH-(CO)-C<sub>2</sub>H<sub>4</sub>-dihydroxyphenyl, -NH-(CO)-  
 CH(OH)-phenyl, -NH-(CO)-CH(NH<sub>2</sub>)-CH<sub>2</sub>(OH), -NH-(CO)-  
 C(CH<sub>3</sub>)<sub>2</sub>NH<sub>2</sub>, -NH-(CO)-NH(C<sub>2</sub>H<sub>5</sub>), -CH<sub>2</sub>OH, -(CO)-NH-cyclopropyl,  
 -(CO)-NH-CH(CH<sub>3</sub>)<sub>2</sub>,

5 whereby the pyrrolidinyl can optionally be substituted with hydroxy  
 or the group -NH<sub>2</sub>,

10 X represents an oxygen atom or the group -NH-,

R<sup>1</sup> represents halogen or hydroxymethyl and

R<sup>2</sup> represents -C<sub>2</sub>H<sub>5</sub> optionally substituted in one or more places, the  
 same way or differently with hydroxy, imidazolyl  
 or represents -C<sub>3</sub>H<sub>7</sub> or -C<sub>4</sub>H<sub>8</sub> optionally substituted in one or more  
 15 places, the same way or differently with the group -NH<sub>2</sub>, -NH-  
 (CO)-CH(NH<sub>2</sub>)-C<sub>2</sub>H<sub>4</sub>-COOH, -NH-(CO)-phenyl, -NH-(CO)-CH<sub>2</sub>-  
 phenyl, -NH-(CO)-CH<sub>2</sub>-CH(CH<sub>3</sub>)-phenyl, -NH-(CO)-CH<sub>2</sub>-O-phenyl,  
 -NH-(CO)O-CH<sub>2</sub>-phenyl, -NH-(CO)-CH(NH<sub>2</sub>)CH<sub>2</sub>-phenyl,



20

whereby the phenyl can optionally be substituted in one or more  
 places, the same or differently with halogen, -CH<sub>3</sub> or -(CO)-

C(CH<sub>2</sub>)(C<sub>2</sub>H<sub>5</sub>).

or represents C<sub>3</sub>-alkinyl,

as well as all related isotopes, diastereomers, enantiomers, solvates, polymorphs or pharmaceutically acceptable salts thereof.

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8. Compounds of general formula (I) according to claim 7,  
N-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-  
bromo-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
10 1-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-  
bromo-4-pyrimidinyl]amino]propyl]-2-oxo-3-pyrrolidinecarboxylic acid,  
N-[3-[[5-bromo-4-[(3-[(5-oxo-2-pyrrolidinyl)carbonyl]amino]propyl]amino]-2-  
pyrimidinyl]amino]phenyl]-1-pyrrolidinecarboxamide,  
Pyrrolidine-1-carboxylic acid [3-(5-bromo-4-{3-[2-(2,4-dichloro-phenyl)-  
acetylamino]-propylamino}-pyrimidin-2-ylamino)-phenyl]-amide,  
15 Pyrrolidine-1-carboxylic acid [3-(5-bromo-4-{3-[2-(4-bromo-phenyl)-  
acetylamino]-propylamino}-pyrimidin-2-ylamino)-phenyl]-amide,  
Pyrrolidine-1-carboxylic acid (3-{5-bromo-4-[3-(2-p-tolyl-acetylamino)-  
propylamino]-pyrimidin-2-ylamino}-phenyl)-amide,  
Pyrrolidine-1-carboxylic acid [3-(5-bromo-4-{3-[2-(2,4-difluoro-phenyl)-  
20 acetylamino]-propylamino}-pyrimidin-2-ylamino)-phenyl]-amide,  
Pyrrolidine-1-carboxylic acid {3-[5-bromo-4-(3-{2-[2,3-dichloro-4-(2-  
methylene-butyryl)-phenoxy}-acetylamino)-propylamino)-pyrimidin-2-  
ylamino]-phenyl}-amide,  
Pyrrolidine-1-carboxylic acid [3-(5-bromo-4-{3-[3-(2,3-dichloro-phenyl)-  
butyrylamino]-propylamino}-pyrimidin-2-ylamino)-phenyl]-amide,  
25 Pyrrolidine-1-carboxylic acid (3-{5-bromo-4-[3-(3-bromo-benzoylamino)-  
propylamino]-pyrimidin-2-ylamino}-phenyl)-amide,  
N-(3-((4-((4-aminobutyl)amino)-5-bromo-2-pyrimidinyl)amino)phenyl)-1-  
pyrrolidinecarboxamide,  
30 N-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-  
bromo-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
N-[3-[(2S)-2-Amino-1-oxo-3-phenylpropyl]amino]-5-[(5-bromo-4-(prop-2-  
ynyl)oxy)pyrimidin-2-yl]amino]phenyl]pyrrolidine-1-carboxamide,

N-[3-[(2R)-2-Amino-1-oxo-3-phenylpropyl]amino]-5-[[5-bromo-4-(prop-2-  
ynyloxy)pyrimidin-2-yl]amino]phenyl]pyrrolidine-1-carboxamide,  
(aR)-a-Amino-N-[3-[[5-bromo-4-(prop-2-ynyloxy)pyrimidin-2-yl]amino]-5-  
(hydroxymethyl)phenyl]benzenepropanamide,  
5 2-[3-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-5-hydroxymethyl-  
phenylamino]-ethanol,  
(2R)-Amino-N-[3-hydroxymethyl-5-(4-prop-2-ynyloxy-pyrimidine-2-ylamino)-  
phenyl]-3-phenyl-propionamide,  
10 3-((2R)-Amino-3-phenyl-propionylamino)-5-(5-bromo-4-prop-2-ynyloxy-  
pyrimidine-2-ylamino)- N-cyclopropyl-benzamide,  
3-((2R)-Amino-3-phenyl-propionylamino)-5-(5-bromo-4-prop-2-ynyloxy-  
pyrimidin-2-ylamino)- N-isopropyl-benzamide,  
Phenylmethyl [3-[[2-[[3-[(ethylamino)carbonyl]amino]phenyl]amino]-5-  
15 (hydroxymethyl)pyrimidine-4-yl]amino]propyl]carbamate,  
Pyrrolidine-1-carboxylic acid (3-{4-[3-((2R)-amino-3-phenyl-propionylamino)-  
propylamino]-5-bromo-pyrimidine-2-ylamino}-phenyl)-amide,  
Pyrrolidine-1-carboxylic acid (3-{4-[3-((2S)-amino-3-phenyl-propionylamino)-  
propylamino]-5-bromo-pyrimidine-2-ylamino}-phenyl)-amide,  
2-[3-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenylamino]-ethanol,  
20 1-Amino-cyclopentancarbonylic acid[3-(5-bromo-4-prop-2-ynyloxy-  
pyrimidine-2-ylamino)-phenyl]-amide,  
1-Amino-cyclohexancarbonylic acid-[3-(5-bromo-4-prop-2-ynyloxy-  
pyrimidine-2-ylamino)-phenyl]-amide,  
(2S)-Amino-N-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-  
25 phenyl-propionamide,  
(2R)-Amino-N-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-  
phenyl-propionamide,  
2-[[3-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenylamino]-  
methyl]-phenol,  
30 (2R)-Amino-N-[3-(5-bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-  
(4-hydroxy-phenyl)-propionamide,  
N-[3-(5-Bromo-4-prop-2-ynyloxy-pyrimidine-2-ylamino)-phenyl]-3-(3,4-  
dihydroxy-phenyl)-propionamide,

N-[3-(5-Bromo-4-prop-2-ynyl-oxo-pyrimidine-2-ylamino)-phenyl]-2-hydroxy-(2S)-phenyl-acetamide,  
N-[3-(5-Bromo-4-prop-2-ynyl-oxo-pyrimidine-2-ylamino)-phenyl]-2-hydroxy-(2R)-phenyl-acetamide,  
5 (2S)-Amino-N-[3-(5-bromo-4-prop-2-ynyl-oxo-pyrimidine-2-ylamino)-phenyl]-3-hydroxy-propionamide,  
(2R)-Amino-N-[3-(5-bromo-4-prop-2-ynyl-oxo-pyrimidine-2-ylamino)-phenyl]-3-hydroxy-propionamide,  
10 2-Amino-N-[3-(5-bromo-4-prop-2-ynyl-oxo-pyrimidine-2-ylamino)-phenyl]-2-methyl-propionamide,  
(2S)-Amino-N-[3-(5-bromo-4-prop-2-ynyl-oxo-pyrimidine-2-ylamino)-phenyl]-3-(4-hydroxy-phenyl)-propionamide,  
15 (2S)-Amino-N-[3-(5-bromo-4-prop-2-ynyl-oxo-pyrimidine-2-ylamino)-phenyl]-3-p-tolyl-propionamide or  
(2R)-Amino-N-[3-(5-bromo-4-prop-2-ynyl-oxo-pyrimidine-2-ylamino)-phenyl]-3-p-tolyl-propionamide.

9. Compounds of general formula (I) according to claim 1

in which

20 A or B in each case independently of one another represent halogen, hydrogen or the group -SO<sub>2</sub>-CH<sub>3</sub>, -NO<sub>2</sub>, -NH<sub>2</sub>, -CF<sub>3</sub>, -CH<sub>2</sub>-NH-(CO)-NH<sub>2</sub>, -CH<sub>2</sub>-pyrrolidinyl, -NH-(CO)-CH<sub>3</sub>, -NH-(CO)-hexyl-NH<sub>2</sub>, -NH-(CO)-phenyl, -NH-(CO)-pyrrolidinyl, --NH-(CO)-CH(NH<sub>2</sub>)-CH<sub>2</sub>-phenyl, NH-(CO)-OCH<sub>3</sub>, -NH-(CO)-OCH(CH<sub>3</sub>)<sub>2</sub>, -NH-(CO)-OC<sub>2</sub>H<sub>4</sub>-morpholino, -NH-(CO)-NH-cyclopropyl, -NH-(CO)-morpholino, -NH-(CO)-NH-C<sub>2</sub>H<sub>4</sub>-morpholino, -NH-(CO)-NH-hydroxycycloalkyl, hydantoinyl,

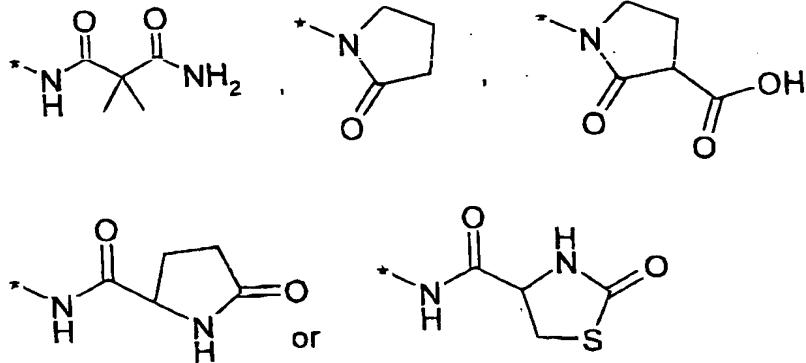
whereby the pyrrolidinyl can optionally be substituted with hydroxy or the group -NH<sub>2</sub> and

30 whereby the hydantoinyl can optionally be substituted with the group -CH<sub>3</sub> or -(CO)-thiazolidinonyl,

X represents the group -NH-,

R<sup>1</sup> represents halogen and

$R^2$  represents  $-\text{CH}_2\text{-dihydroxyphenyl}$ ,  $-\text{C}_2\text{H}_4\text{-imidazolyl}$ , or  $-\text{C}_3\text{H}_7$   
optionally substituted in one or more places, the same way or  
differently with



5 as well as all related isotopes, diastereomers, enantiomers, solvates,  
polymorphs or pharmaceutically acceptable salts thereof.

10. Compounds of general formula (I) according to claim 7,  
 4-((4-((2-(1H-imidazol-4-yl)ethyl)amino)-5-iodo-2-pyrimidinyl)amino)-  
 benzenesulfonamide,
- 10 N-((3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
 pyrimidinyl)amino)phenyl)methyl)-urea,
- 15 1-((3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
 pyrimidinyl)amino)phenyl)methyl)-3-pyrrolidinol,
- 15 (3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
 pyrimidinyl)amino)phenyl)-carbamic acid methyl ester,
- 20 N2-(3-aminophenyl)-5-bromo-N4-(2-(1H-imidazol-4-yl)ethyl)-2,4-  
 pyrimidinediamine,
- 20 N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
 pyrimidinyl)amino)phenyl)-N'-cyclopropyl-urea,
- 25 N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
 pyrimidinyl)amino)phenyl)-4-morpholinecarboxamide,
- (3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
 pyrimidinyl)amino)phenyl)-carbamic acid 1-methylethyl ester,
- 25 N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-  
 pyrimidinyl)amino)phenyl)-methanesulfonamide,
- N2-(3-amino-5-(trifluoromethyl)phenyl)-5-bromo-N4-(2-(1H-imidazol-4-

yl)ethyl)-2,4-pyrimidinediamine,  
N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-N'-(2-(4-morpholinyl)ethyl)-urea,  
N2-(3-amino-5-chlorophenyl)-5-bromo-N4-(2-(1H-imidazol-4-yl)ethyl)-2,4-pyrimidinediamine,  
5 (3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-carbamic acid 2-(4-morpholinyl)ethyl ester,  
N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-N'-(4-hydroxycyclohexyl)-urea,  
10 N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-acetamide,  
N-(3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-benzamide,  
15 (4R)-N-[3-[[5-bromo-2-[[3-[(1-pyrrolidinyl)carbonyl]amino]phenyl]amino]-4-pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide,  
3-[3-[[5-bromo-4-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-pyrimidinyl]amino]phenyl]-2,4-imidazolidinedione,  
20 3-[3-[[5-bromo-4-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-pyrimidinyl]amino]phenyl]-1-methyl-2,4-imidazolidinedione,  
1-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-bromo-4-pyrimidinyl]amino]propyl]-2-oxo-3-pyrrolidinecarboxylic acid,  
25 1-[3-[[2-[[3-[(1-aminocyclohexyl)carbonyl]amino]phenyl]amino]-5-bromo-4-pyrimidinyl]amino]propyl]-2-oxo-3-pyrrolidinecarboxylic acid,  
N-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-bromo-4-pyrimidinyl]amino]propyl]-5-oxo-2-pyrrolidinecarboxamide,  
30 N-[3-[[2-[[3-[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]phenyl]amino]-5-chloro-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
3-[3-[[5-bromo-4-[(3,4-dihydroxyphenyl)methyl]amino]-2-pyrimidinyl]amino]phenyl]-2,4-imidazolidinedione,  
3-[3-[[5-bromo-4-[(3,4-dihydroxyphenyl)methyl]amino]-2-pyrimidinyl]amino]phenyl]-1-methyl-2,4-imidazolidinedione,  
4R)-N-[3-[[5-bromo-2-[[3-(2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide,

N-[3-[[5-bromo-2-[(3-(2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-5-oxo-2-pyrrolidinecarboxamide,  
N-[3-[[5-bromo-2-[(3-(2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-2,2-dimethyl-propanediamide,  
5 3-[3-[[5-bromo-4-[(3-(2-oxo-1-pyrrolidinyl)propyl]amino]-2-pyrimidinyl]amino]phenyl]-2,4-imidazolidinedione,  
pyrimidinyl]amino]phenyl]-2,4-imidazolidinedione,  
(4R)-N-[3-[[5-bromo-2-[(3-(3-methyl-2,5-dioxo-1-imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide or  
4-pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide or  
10 (4R)-N-[3-[[5-bromo-2-[(3-[2,5-dioxo-3-[(4R)-2-oxo-4-thiazolidinyl]carbonyl]-1-imidazolidinyl)phenyl]amino]-4-pyrimidinyl]amino]propyl]-2-oxo-4-thiazolidinecarboxamide.

11. A compound of following structure

N-(3-((4-((3-(aminomethyl)phenyl)amino)-5-bromo-2-pyrimidinyl)amino)phenyl)-1-pyrrolidine-carboxamide,  
15 4-[[5-bromo-4-[(2-(1H-imidazol-5-yl)ethyl)amino]-2-pyrimidinyl]amino]-1-4-[[5-bromo-4-[(2-(1H-imidazol-5-yl)ethyl)amino]-2-pyrimidinyl]amino]-1H-naphthaleneacetic acid,  
20 5-[[5-bromo-4-[(2-(1H-imidazol-5-yl)ethyl)amino]-2-pyrimidinyl]amino]-1H-indole-2-carboxylic acid, ethyl ester,  
5-bromo-N4-[2-(1H-imidazol-5-yl)ethyl]-N2-(2-methyl-6-quinolinyl)-2,4-pyrimidinediamine,  
25 4-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-benzamide,  
4-((4-((2-(1H-imidazol-4-yl)ethyl)amino)-5-iodo-2-pyrimidinyl)amino)-benzenesulfonamide,  
30 3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-benzamide,  
3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-benzenesulfonamide,  
5-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-1,3-dihydro-2H-benzimidazol-2-one,  
3-((5-bromo-4-((2-(1H-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-benzoic acid methyl ester,

3-amino-5-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)- benzoic acid methyl ester,  
N-((3-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)methyl)-methanesulfonamide,  
5 4-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-  
benzoic acid methyl ester,  
3-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-  
phenol,  
10 5-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-1*H*-  
isoindole-1,3(2*H*)-dione,  
5-bromo-N<sup>4</sup>-(2-(1*H*-imidazol-4-yl)ethyl)-N<sup>2</sup>-(3-methylphenyl)-2,4-  
pyrimidinediamine,  
N-(3-((5-bromo-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)phenyl)-methanesulfonamide,  
15 4-((4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-5-methyl-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
4-((4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-5-(trifluoromethyl)-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
20 4-((4-((3-aminopropyl)amino)-5-bromo-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
4-((5-bromo-4-((3-(1*H*-imidazol-1-yl)propyl)amino)-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
4-((5-bromo-4-((2-(1-pyrrolidinyl)ethyl)amino)-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
25 4-((4-((4-aminobutyl)amino)-5-bromo-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
4-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-pyrimidinyl)amino)-  
butanoic acid,  
4-((4-((3-((aminocarbonyl)amino)propyl)amino)-5-bromo-2-  
30 pyrimidinyl)amino)-benzenesulfonamide,  
4-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-pyrimidinyl)amino)-  
butanoic acid ethyl ester,  
4-((5-bromo-4-((4-(methylamino)butyl)amino)-2-pyrimidinyl)amino)-

benzenesulfonamide,  
4-((5-bromo-4-((2-(1*H*-imidazol-1-yl)ethyl)amino)-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
4-((5-ethyl-4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
4-((4-((2-(1*H*-imidazol-4-yl)ethyl)amino)-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
4-((5-bromo-4-((2-(2-pyridinyl)ethyl)amino)-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
4-((5-bromo-4-((2-(1*H*-indol-3-yl)ethyl)amino)-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
2-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-pyrimidinyl)amino)-  
acetamide,  
*N*-(2-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-  
pyrimidinyl)amino)ethyl)-acetamide,  
3-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-pyrimidinyl)amino)-  
propanamide,  
*N*-(4-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-  
pyrimidinyl)amino)butyl)-acetamide,  
*N*-(3-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-  
pyrimidinyl)amino)propyl)-acetamide,  
*N*-(3-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-  
pyrimidinyl)amino)propyl)-2-furancarboxamide,  
*N*-(3-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-  
pyrimidinyl)amino)propyl)-1*H*-pyrrole-2-carboxamide,  
4-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-pyrimidinyl)amino)-  
butanamide,  
*N*-(3-((2-((4-(aminosulfonyl)phenyl)amino)-5-bromo-4-  
pyrimidinyl)amino)propyl)-2-thiophenecarboxamide,  
4-((4-(4-(aminomethyl)-1-piperidinyl)-5-bromo-2-pyrimidinyl)amino)-  
benzenesulfonamide,  
4-(5-Brom-4-prop-2-ynylamino-pyrimidin-2-ylamino)-phenyl]-N,N-  
dimethylaminosulfonylamin,

- 1-Methyl-1H-imidazol-4-sulfonsäure [4-(5-brom-4-prop-2-ynylamino-pyrimidin-2-ylamino)-phenyl]-amid,  
3-(5-Bromo-4-prop-2-ynylamino-pyrimidine-2-ylamino)-benzoic acid ethyl ester,  
4-(5-Bromo-4-prop-2-ynylamino-pyrimidine-2-ylamino)-benzoic acid ethyl ester,  
2-(5-Bromo-4-prop-2-ynylamino-pyrimidine-2-ylamino)-phenol,  
2-(5-Bromo-4-prop-2-ynylamino-pyrimidine-2-ylamino)-benzoic acid methyl  
ester,  
3-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-phenol,  
3-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-benzoic acid ethyl ester,  
2-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-benzoic acid ethyl ester,  
3-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-benzoic acid ethyl ester,  
4-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-benzoic acid ethyl ester,  
4-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-phenol,  
4-(5-Nitro-4-prop-2-ynylamino-pyrimidine-2-ylamino)-[2-Methyl 3-[[5-bromo-4-(prop-2-ynylamino)pyrimidin-2-yl]amino]-5-[(2-hydroxyethyl)amino]benzoate],  
Methyl 3-amino-5-[[5-bromo-4-(prop-2-ynylamino)pyrimidin-2-yl]amino]benzoate  
or  
3-[Bis-(2-hydroxy-ethyl)-amino]-5-(5-bromo-4-prop-2-ynylamino-pyrimidine-2-ylamino)-benzoic acid methyl ester.
12. Pharmaceutical composition comprising as an active ingredient at least one compound of general formula (I) according to any one of claims 1 to 10 or compounds according to claim 11 in an therapeutically effective amount for the prevention or treatment of a disorder caused by, associated with or accompanied by disruptions of cell proliferation and/or angiogenesis together with an pharmaceutically acceptable carrier, diluent or excipient.
13. Use of a compound of general formula (I) according to claim 1 or 10 or compounds according to claim 11 for the manufacture of a medicament for the prevention or treatment of a disorder caused by, associated with or accompanied by any abnormal kinase activity selected from Chk, Akt, Pdk, Cdk and/or VEGF-R activity as well as combinations thereof.

14. The use of a compound of general formula (I) according to any one of claims 1 to 5, wherein the kinase is selected from PDK1, Akt1, Akt2 and/or Akt3.
- 5 15. The use of a compound of general formula (I) according to claim 13, wherein the kinase is selected from PDK1, Akt1, Akt2 and/or Akt3 in combination with VEGF-R.
- 10 16. The use of a compound of general formula (I) according to any one of claims 1 and 6 to 8, wherein the kinase is selected from Chk1 and/or Chk2.
- 15 17. The use according to any one of claims 13 to 16, wherein the disorder is selected from cancer, angiofibroma, arthritis, eye diseases, auto-immune diseases, chemotherapy agent-induced alopecia and mucositis, Crohn-disease, endometriosis, fibrotic diseases, hemangioma, cardiovaskular diseases, infectious diseases, nephrological diseases, chronic und acute neurodegenerative diseases, like disruptions of nerval tissue, viral infections, to prevent restenosis of vessels, for preventing the formation of scars, preventing or treating keratoma seniles and contact dermatitis.
- 20 18. The use according to claim 17, wherein cancer stands for solide tumours, tumour- or metastasis growth, Kaposi Sarkom, Hodgkin's disease and/or leukemia, arthritis stands for rheumatoid arthritis, eyes diseases stand for diabetic retinopathy, neovaskular glaukoma, auto-immune diseases stand for psoriasis, alopecia and/or multiple sklerosis, fibrotic diseases stand for cirrhosis of the liver, mesangial cell proliferative diseases, arteriosklerosis, infectiouse diseases stand for diseases that are caused by unicellular parasites, cardiovascular diseases stand for stenosis, like stent induced restenosis, arteriosklerosis and restenosis, nephrological diseases stand for glomerulonephritis, diabetic nephropaty, malignant nephrosklerosis, thrombic mikroangiopathis syndrome, transplant

rejections and glomerulopathy.

chronic neurodegenerative diseases stand for Huntington's disease,  
amyotrophic lateralsklerosis, Parkinsons disease, AIDS, dementia und  
Alzheimer's disease,

5 acute neurodegenerative diseases stand for ischemias of the brain and  
neurotraumas, and  
viral infections stand for cytomegalic infections, herpes, hepatitis B or C and  
HIV.

10 19. A method of treating a mammal having a disease-state alleviated by the  
inhibition of Akt, Pdk, chk and/or VEGF-R activity, wherein the method  
comprises administering to a mammal a therapeutically effective amount of a  
compound of general formula (I) according to any one of claims 1 to 10 or  
the compounds of claim 11.

15 20. The method of claim 19 wherein the mammal is a human.

21. The method of claim 19 or 20, wherein the disease-state is cancer,  
angiofibroma, arthritis, eye diseases, auto-immune diseases, chemotherapy  
agent-induced alopecia and mucositis, Crohn's disease, endometriosis,  
20 fibrotic diseases, hemangioma, cardiovascular diseases, infectious diseases,  
nephrological diseases, chronic und acute neurodegenerative diseases, like  
disruptions of nerval tissue, viral infections, prevention of restenosis of  
vessels, prevention the formation of scars, prevention or treatment of  
25 keratoma seniles or contact dermatitis.

22. The method of claim 21, wherein  
cancer stands for solide tumours, tumour- or metastasis growth, Kaposi  
Sarkom, Hodgkin's disease and/or leukemia,  
30 arthritis stands for rheumatoid arthritis,  
eyes diseases stand for diabetic retinopathy, neovaskular glaukoma,  
auto-immune diseases stand for psoriasis, alopecia and/or multiple sklerosis,  
fibrotic diseases stand for cirrhosis of the liver, mesangial cell proliferative

diseases, arteriosklerosis,

infectious diseases stand for diseases that are caused by unicellular

parasites,

cardiovascular diseases stand for stenosis, like stent induced restenosis,

arteriosklerosis and restenosis,

5 nephrological diseases stand for glomerulonephritis, diabetic nephropathy,

malignant nephrosklerosis, thrombotic mikroangiopathis syndrome, transplant

rejections and glomerulopathy,

chronic neurodegenerative diseases stand for Huntington's disease,

10 amyotrophic lateralsklerosis, Parkinsons disease, AIDS, dementia und

Alzheimer's disease,

acute neurodegenerative diseases stand for ischemias of the brain and

neurotraumas, and

viral infections stand for cytomegalic infections, herpes, hepatitis B or C and

15 HIV.